

## Claims

1. Strip casting machine comprised of two casting rollers (1, 2, 21) arranged parallel to each other, forming a casting gap (6) delimited on both sides by narrow lateral guides (5), and a stand (3, 23) supporting the casting rollers (1, 2, 21), wherein the casting rollers (1, 2, 21) are provided with cooled roll barrels forming the adjustable casting gap (6), and wherein bearing journals (8, 9) are provided for supporting the casting rollers (1, 2, 21) on the stand (3, 23),  
*Sub-*  
*A<sub>1</sub>* characterized in that  
the cooled roll barrel is comprised essentially of a cylindrical casing (27), which is supported on a stationary axle (24) fixedly connected to the stand (3, 23), by means of at least one supporting element, in particular, by supporting elements (29, 29') arranged on both sides, or by at least one supporting element (29, 29'), in particular protruding into the casing (27) on both sides.
2. Strip casting machine according to claim 1, characterized in that  
one supporting element (29') forms a part of the casing (27) and one supporting element (29) forms a part of the axle (24).
3. Strip casting machine according to claim 1, characterized in that  
the supporting elements (29, 29') are concentrical bearing rings connectable to the casing (27).
4. Strip casting machine according to claim 1, characterized in that

the supporting elements (29, 29') form a part of the casing (27).

5. Strip casting machine according to at least one of the claims 1 through 4, characterized in that

a first portion of the length of the supporting elements or the bearing rings (29, 29') projects into the casing and is provided with inlet and outlet bores (32) between the stationary axle (24) and the casing (27) for circulation of a cooling medium, and in that a second portion of the length of the supporting elements or the bearing rings (29, 29') projects from the casing (27) and is provided with bearing elements (31) and drive elements (37) for a rotational movement of the casing (27), provided with the supporting elements, or of the casing (27), fixedly connected to the bearing rings (29, 29'), on the stationary axle (24).

6. Strip casting machine according to at least one of the claims 1 through 5, characterized in that  
a crown gear (37) is connected to the bearing ring (29), which is in active connection with a toothing of a stationary drive (36).

7. Strip casting machine according to claim 6, characterized in that  
a drive gear (36) is flanged to the stationary axle (24).

8. Strip casting machine according to claim 6, characterized in that  
one or several annular torque motors drive the casing (27) by way of the bearing rings (29).

9. Strip casting machine according to at least one of the claims 1 through 8, characterized in that the bearing rings (29, 29') are preferably provided with radial bores (32) and grooves (33) for feeding the cooling medium from the stationary axle (24) into the casing (27).
10. Strip casting machine according to claim 9, characterized in that the stationary axle (24) is provided on both sides with axial bores (30') and with radial bores (34) aligned with grooves (33) of the bearing rings (29, 29').
11. Strip casting machine according to at least one of the claims 1 through 10, characterized in that the casing (27) is provided across its circumference with axially arranged bores (39) for a circulation of a cooling medium.
12. Strip casting machine according to at least one of the claims 1 through 11, characterized in that engaging keys (28) having a straining ring are provided between the bearing rings (29, 29') and the casing (27).
13. Strip casting machine according to at least one of the claims 1 through 12, characterized in that the stationary axle (24) is provided with inlet and outlet means (30) for a cooling medium, which simultaneously connect or disconnect inlet and outlet lines for cooling medium in the stand (23) when the

casting roller (21) is inserted into or lifted off the stand (23).

14. Strip casting machine according to at least one of the claims 1 through 13,  
characterized in that  
that the stationary axle (24) is provided on both sides of the casing (27) with a stop surface (12, 13) and a support surface (10, 11), respectively, and that stop surfaces and support surfaces are arranged on the stand for inserting the casting rollers from above.
15. Strip casting machine according to claim 14,  
characterized in that  
a locking element (40) for fixedly securing the stationary axle (24) is provided on both sides of the stand (23), respectively.
16. Strip casting machine according to at least one of the claims 1 through 15,  
characterized in that  
an electromagnetic brake (41) for the metal bath between the rollers is arranged between the rotating casing (27) and the stationary axle (24).
17. Strip casting machine according to claim 16,  
characterized in that  
the electromagnetic brake (41) within the casting roller (21) is arranged stationarily on the stationary axle (24).
18. Strip casting machine according to at least one of the claims 1 through 17,  
characterized in that

the cylindrical casing (27) is supported on the stationary axle (24) by additional bearing rings between the two bearing rings (29, 29').

19. Strip casting machine according to at least one of the claims 1 through 18, characterized in that the drive (36) of the casting rollers (1, 2, 21) is effected by means of a motor, preferably a brushless annular torque motor, arranged on or at the axle.
20. Strip casting machine according to at least one of the claims 1 through 19, characterized in that the casing (27) is configured as a single piece or of multiple pieces.
21. Strip casting machine according to claim 20, characterized in that the connection of the casing pieces (27, 27') is preferably an electron-beam weld joint.
22. Strip casting machine according to at least one of the claims 1 through 21, characterized in that the casing (27) is built of two or more sleeves of different materials.